

In the Claims:

1. (Original) A heat sink assembly with integrated electronics comprising:

a cover having at least one side open for exposing an interior cavity, said cover being made of a material having the capability of withstanding high temperatures;

at least one hybrid circuit housed in said cavity and having interconnect capability available at said open side of said cover;

a bottom for attachment to and sealing of said at least one open side of said cover, said bottom being made from a material having heat sink capabilities and having a plurality of interconnect pins molded therein, said pins providing electrical interconnect capabilities between said at least one hybrid circuit and an external device.

2. (Original) The heat sink assembly as claimed in claim 1 wherein said cover further comprises a track molded in an edge of said open side, and wherein said bottom has a bead molded therein for interconnection with said track in said open side of said cover.

3. (Original) The heat sink assembly as claimed in claim 2 wherein an adhesive is applied to said track thereby sealing said bottom to said cover.

4. (Original) The heat sink assembly as claimed in claim 1 wherein said bottom is cast aluminum.

5. (Original) The heat sink assembly as claimed in claim 1 wherein said pins are wire bond compatible at one end for connection to said at least one hybrid circuit and said pins are solderable at another end for connection to said external device.

6. (Original) The heat sink assembly as claimed in claim 1 wherein said sealed cover and bottom are filled with a dielectric gel material.

7. (Original) The heat sink assembly as claimed in claim 1 wherein said cover has partitions separating said at least one hybrid circuit from another hybrid circuit housed in said cover.

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